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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/654,798

09/04/2003

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EXAMINER

TIEU, BINH KIEN

ART UNIT

PAPER NUMBER

2614

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/654,798 | <b>Applicant(s)</b><br>HOUGHTON ET AL. |  |
|                              | <b>Examiner</b><br>BINH K. TIEU      | <b>Art Unit</b><br>2614                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-17, 19-28, 30-34 and 36-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-17, 30-34 and 36-56 is/are allowed.
- 6) ☒ Claim(s) 19, 20 and 25-28 is/are rejected.
- 7) ☒ Claim(s) 21-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290) in view of Kallstenius (Pub. No.: US 2005/0041692) *(Both references were cited in the previous Office Action)*.

**Regarding claim 19**, Couillard teaches a method of synchronizing a transmitting computing device to a receiving computing device of a packet switched telecommunication network comprising:

requesting an absolute time from a network time protocol (NTP) server;  
  
receiving said absolute time; and  
  
inputting an adjustment parameter into a frequency controlling hardware of said transmitting computing device or said receiving computing device (paragraphs [0047]-[0052]).

It should be noticed that Couillard fails to clearly teach the features of requesting the absolute time from a server, using a Network Time Protocol (NTP); and input the adjustment parameter into a frequency controlling hardware of a frequency oscillator of said computing device to adjust a phase of said frequency oscillator. However, Kallstenius teaches such features paragraphs [0038] and [0059]-[0060] for a purpose of synchronizing the oscillator of client 16 with the timeserver.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of requesting the absolute time from a server, using a Network Time Protocol (NTP); and input the adjustment parameter into a frequency controlling hardware of a frequency oscillator of said computing device to adjust a phase of said frequency oscillator, as taught by Kallstenius, into view of Couillard in order to synchronize the oscillators of computer devices to the NTP server.

Regarding claim 25, Kallstenius further teaches limitations of the claim in paragraph [0036] and [0058]-[0059].

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290) in view of Kallstenius (Pub. No.: US 2005/0041692) as applied to claim

19 above, and further in view of Michelson et al. (Pub. No.: US 2008/0031229, *also cited in the previous Office Action*).

Regarding claim 20, Couillard teaches all subject matters as claimed above, except for the feature of residential VoIP gateway. However, Michelson et al. (“Michelson”) teaches such feature in paragraph [0022] for a purpose of establishing a VoIP call between a gateway and a soft switch.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of residential VoIP gateway, as taught by Michelson, into view of Couillard and Kallstenius in order to provide VoIP service to end users.

4. Claims 26-27 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290) in view of Kallstenius (Pub. No.: US 2005/0041692) and Fischer et al. (Pub. No.: US 2002/0027886) as applied to claim 6 above, and further in view of Hostetter et al. (US Pat. No. 5,450,395) (*All references were cited in the previous Office Action*).

**Regarding claim 26**, Couillard teaches a method of transmitting higher bandwidth signals between a first computing device and a second computing device comprising synchronizing said first computing device and a second computing device by way of using network time protocol (NPT) server (paragraphs [0047]-[0052]).

Kallstenius teaches a client 16 requests absolute time by way using (transmitting) a network time protocol (NPT) message to timeserver 12 (see paragraph [0038]).

Fischer teaches a method of transmitting voice and voice band data and other higher bandwidth signals between a first computing device and a second computing device comprising synchronizing said first computing device and a second computing device (paragraphs [0084]-[0085] and [0387]).

It should be noticed that Couillard, Kallstenius and Fischer, in combination, fails to suggest using synchronization to improve signal to noise of two devices. However, Hostetter teaches a suggestion of improving the signal-to-noise ratio between a plurality of transmitter and a receiver by a way of the transmitters and receive to be synchronized (col.1, lines 55-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of a suggestion of improving the signal-to-noise ratio between a plurality of transmitter and a receiver by a way of the transmitters and receive to be synchronized, as taught by Hostetter into view of Couillard, Kallstenius and Fischer in order to better quality of voice to voice-over-IP services.

Regarding claim 27, Fischer further teaches limitations of the claim in paragraph [0117].

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hostetter et al. (US. Pat. #: 5,450,395) in view of Kallstenius (Pub. No.: US 2005/0041692) and Ransom et al. (Pub. No.: US 2003/0204756 *as cited in the previous Office Action*).

**Regarding claim 28**, Hostetter et al. (“Hostetter”) teaches a method of improving the signal to noise ratio of voice band data comprising synchronizing computing devices (col.1, lines 55-60).

Kallstenius teaches a client 16 requests absolute time by way using (transmitting) a network time protocol (NTP) message to timeserver 12 (see paragraph [0038]).

It should be noticed that Hostetter and Kallstenius fails to clearly teach the feature of syncing the computing devices to an NTP server. However, Ransom teaches such feature in paragraph [0122] for ensuring transferred messages having the correct time and their contents having accurate time.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of syncing the computing devices to an NTP server, as taught by Ransom, into view of Hostetter and Kallstenius in order to provide accurate time to the transmitted messages.

#### ***Allowable Subject Matter***

6. Claims 11-17, 30-34, 36-47 and new claims 48-56 are allowed.
7. Claims 21-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

8. Applicant's arguments filed 06/27/2008 have been fully considered but they are not persuasive.

A/. In response to the Applicants' argument on page 12 wherein the Applicants stated as followings:

***“...The Applicants respectfully submit that Couillard is not combinable with Kallstenius because Couillard teaches away from its combination with Kallstenius...Since Couillard utilizes a time offset value to synchronize the time server to the client, Couillard teaches away from using a network time protocol (NTP) (which uses absolute time), as disclosed in Kallstenius. Consequently,...”***

The Examiner respectfully disagreed with the Applicants' argument above. The Applicants argued on the whole invention in each of the Couillard and Kallstenius references to either combinable or not combinable. Applicants did not focus on specific features only recited in the claim. For example, Applicants argued that Couillard teaches the feature of “utilizing a time offset value to synchronize the time server to the client...”, and concluded that Couillard teaches away from teachings of Kallstenius. By reviewing the independent claim 19, Examiner does not see anything that recited the feature of “with or without utilizes a time offset value to ***synchronize the time***” in the claim. Thus, Applicants argued on something which is not clearly stated and/or related to the limitations recited in the claim.

B/. In response to the Applicants' argument in the first (1st) and second (2nd) paragraphs, page 12 wherein the Applicants stated as followings:

***“While Couillard, at paragraphs [0047]-[0052], discloses a “time server,” nowhere does Couillard disclose anything about a network time protocol (NTP) server, as alleged by the Examiner. Therefore, for at least this reason, Couillard does not teach Claim 26. Therefore, ...***

***The Office Action alleges that Kallstenius, at paragraph [0038], teaches “a client 16 requests absolute time by way using (transmitting) a network time protocol (NPT) message to timeserver 12.” However, Claim 26 does not recite anything about “request[ing] absolute time by way using (transmitting) a network time protocol (NPT) message to timeserver 12.” Thus, the Examiner***



***does not show a teaching of what is recited in Claim 26. Therefore, for at least this reason, Claim 26 contains patentable subject matter which should be advanced to allowance."***

The Examiner respectfully disagreed with the Applicants' argument above. The Applicants maybe misunderstood the Office Action. The Examiner cited the reference of Kallstenius in order to prove to the Applicants that the "time server" in Couillard reference is a network time protocol (NPT) server. Kallstenius teaches a "timeserver 12" for receiving requested network time protocol (NPT) message from remote clients. Thus, the "timeserver 12" is NPT server, and so "time server" in Couillard reference.

C/. In response to the Applicant's argument stated from page 19 through the second (2nd) paragraph, pages 20 wherein the Applicants stated as followings:

***"... The Office Action alleges that Hostetter, at col. 1 lines 55-60, teaches "said synchronizing performed to improve signal to noise ratio of said voice band data," as recited in Claim 26. While Hostetter, at col. 1 lines 55-60, may teach improving the signal to noise ratio of a CDMA receiver by way of using direct sequence spectrum techniques, Hostetter, does not teach anything about "improving the signal to noise ratio of voice band data," as recited in Claim 26. For example,...***

***Thus, Hostetter, at Col. 1, line 60 to Col. 2, line 15 describes improving a signal to noise ratio of a carrier signal received by a CDMA receiver over a direct sequence spread spectrum. Therefore, for at least this reason, Hostetter does not teach "improving the signal to noise ratio of voice band data," as recited in Claim 26. Hence, the Office Action does not show a teaching of what is recited in Claim 26..."***

The Examiner respectfully disagrees with the Applicants' argued above. As stated in the previous responses in the previous Office Action, that according to those skilled in the art to understand that voice band data, audio data or digitized data are not transmitted from an

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originating point to the other destination point by without any modulations and coding. They must be modulated or coded with a carrier signal having a desired transmit frequency or frequencies. *The modulated carrier signal that contained the voice band data* is then transmitted to the destination point through a telecommunication network (i.e., packets network, PSTN, Internet, etc.). Thus, it is clearly understood that Hostetter teaches the synchronization performed to improve signal to noise ratio of a carrier signal, which also means that to improve signal to noise ratio of the *voice band data because the carrier signal contained the voice band data*.

*D/.* In response to the Applicants' arguments stated in the third (3rd) paragraph, page 20 regarding to Couillard being not combinable with Kallstenius. The Applicants should also refer to the response in section "*A/.*" which is applied the same force to this argument.

*E/.* In response to the Applicants' argument stated in the last paragraph, page 20 wherein the Applicants argued that the Examiner has not provided a motivation obtained from the cited references to combine the teachings of the four cited references.

The Examiner respectfully disagrees with the Applicants' argument above. First of all, all references are analogous which teach the field of time server and time synchronization between client terminals. Second, it is well-known to those skilled in the art to understand that a motivation to combine a secondary reference or references into a primary reference is what to improve the system disclosed in the primary reference. In this case, the Examiner has noted that all references teach the same fields of NTP server and time synchronization, which are combining to improve the operation functions of each others in order to control time synchronization to remote client terminals. Thus, the "motivations" provided in the previous

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Office Action as well as in this Office Action, according to the Applicants' opinions, are not the "motivations" for their arguments. However, they are the motivation of the combination of the all references which should be accepted by those skilled in the art because all references have the same common features.

*F/.* In response to the Applicants' arguments stated on pages 21-22 regarding the rejection of claim 28 with the same arguments of Hostetter does not teach "improving the signal to noise ratio of voice band data," as recited in Claim 28. The Applicants should also refer to the response in section "*C/.*" which is applied the same force to this argument.

With all remarks to the Applicants' arguments above, the Examiner believes that the rejections to claims 19-20 and 25-28 have been proper and permissible on the merits. The Examiner has maintained the previous rejections in this Final Office Action for a purpose of a future appeal.

**THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).**

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will

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the statutory period for response expire later than SIX MONTHS from the date of this final action.

Applicant's arguments with respect to claims 19-20 and 25-28 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

**Any response to this final action should be mailed to:**

**Box AF**

**Commissioner of Patents and Trademarks  
Washington, D.C. 20231**

**Or faxed to:**

**(703) 872-9314 or (571) 273-8300 (for formal communications; please  
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mark

**Or:**

**If it is an informal or draft communication, please label  
"PROPOSED" or "DRAFT")**

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401 Dulany Street  
Alexandria, VA 22314**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (571) 272-7510 and E-mail address: [BINH.TIEU@USPTO.GOV](mailto:BINH.TIEU@USPTO.GOV).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (571) 272-7499 and **IF PAPER HAS BEEN**

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**/BINH K. TIEU/**  
Primary Examiner  
Technology Division 2614

Date: March 24, 2009